TECH OPS SEVCON INC Form SC 13D/A January 29, 2010

SECURITIES AND EXCHANGE COMMISSION Washington, D.C. 20549

SCHEDULE 13D

Under the Securities Exchange Act of 1934 (Amendment No. 17)

Tech/Ops Sevcon, Inc. (Name of Issuer)

Common Stock \$0.10 Par Value Per Share (Title of Class of Securities)

_____878293109_____ (CUSIP Number)

Peter D. Goldstein GAMCO Investors, Inc. One Corporate Center Rye, New York 10580-1435 (914) 921-5000

(Name, Address and Telephone Number of Person Authorized to Receive Notices and Communications)

January 28, 2010	
(Date of Event which Requires Filing of this Statement)	

If the filing person has previously filed a statement on Schedule 13G to report the acquisition that is the subject of this Schedule 13D, and is filing this schedule because of $\S\S 240.13d-1(e)$, 240.13d-1(f) or 240.13d-1(g), check the following box .

I

CUSIP No. 878293109

1 Names of reporting persons

I.R.S. identification nos. of above persons (entities only)

Gabelli Funds, LLC

I.D. No. 13-4044523

2 Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a)

(b)

- 3 Sec use only
- 4 Source of funds (SEE INSTRUCTIONS) 00-Funds of investment advisory clients
- 5 Check box if disclosure of legal proceedings is required pursuant to items 2 (d) or 2 (e) X
- 6 Citizenship or place of organization

New York

Number Of : 7 Sole voting power

.

Shares : 210,006 (Item 5)

.

Beneficially : 8 Shared voting power

Owned: None

•

By Each : 9 Sole dispositive power

Reporting : 210,006 (Item 5)

Person :10 Shared dispositive power

.

With : None

.

11 Aggregate amount beneficially owned by each reporting person

210,006 (Item 5)

- 12 Check box if the aggregate amount in row (11) excludes certain shares (SEE INSTRUCTIONS)
- Percent of class represented by amount in row (11)

6.31%

Type of reporting person (SEE INSTRUCTIONS)
IA

CUSIP No. 878293109

Names of reporting persons 1

I.R.S. identification nos. of above persons (entities only)

GAMCO Asset Management Inc.

I.D. No. 13-4044521

2 Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a)

(b)

- 3 Sec use only
- 4 Source of funds (SEE INSTRUCTIONS) 00-Funds of investment advisory clients
- 5 Check box if disclosure of legal proceedings is required pursuant to items 2 (d) or 2 (e)
- 6 Citizenship or place of organization

New York

Owned

Number Of : 7 Sole voting power

Shares 443,019 (Item 5)

Shared voting power

Beneficially : 8

None

By Each : 9

Reporting 443,019 (Item 5)

Person :10

Shared dispositive power

Sole dispositive power

With None

11 Aggregate amount beneficially owned by each reporting person

443,019 (Item 5)

- 12 Check box if the aggregate amount in row (11) excludes certain shares (SEE INSTRUCTIONS)
- 13 Percent of class represented by amount in row (11)

13.32%

14 Type of reporting person (SEE INSTRUCTIONS) IA, CO

CUSIP No. 878293109

1 Names of reporting persons

I.R.S. identification nos. of above persons (entities only)

Teton Advisors, Inc.

I.D. No. 13-4008049

2 Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a)

(b)

- 3 Sec use only
- 4 Source of funds (SEE INSTRUCTIONS) 00 – Funds of investment advisory clients
- 5 Check box if disclosure of legal proceedings is required pursuant to items 2 (d) or 2 (e)
- 6 Citizenship or place of organization

Delaware

Number Of : 7 Sole voting power

:

Shares : 82,348 (Item 5)

:

Beneficially : 8 Shared voting power

:

Owned: None

By Each : 9 Sole dispositive power

.

Reporting : 82,348 (Item 5)

Person :10 Shared dispositive power

:

With : None

Aggregate amount beneficially owned by each reporting person

82,348 (Item 5)

- 12 Check box if the aggregate amount in row (11) excludes certain shares (SEE INSTRUCTIONS)
- Percent of class represented by amount in row (11)

2.48%

14 Type of reporting person (SEE INSTRUCTIONS)

IA, CO

CUSIP No.	878293109									
1	Names of reporting I.R.S. identification	persons nos. of above persons	(entities only)							
	GGCP, Inc.	•	•	I.D.						
2	No. 13-3056041	ate hov if a member of	a group (SEE INSTRUCTIONS) (a)							
2	Check the appropria	ate box if a member of	a group (SEE INSTRUCTIONS) (a)							
	(b)									
3	Sec use only	Sec use only								
4	Source of funds (SEE INSTRUCTIONS) None									
5	Check box if disclos	sure of legal proceeding	ngs is required pursuant to items 2 (d) or 2 (e)							
6	Citizenship or place New York	e of organization								
	Number Of	: 7	Sole voting power							
	Shares	Shares : None								
	Beneficially	: 8 :	Shared voting power							
	Owned	:	None							
	By Each	: 9	Sole dispositive power							
	Reporting	· :	None							
	Person	:10	Shared dispositive power							
	With	: :	None							
11	Aggregate amount b	: peneficially owned by	each reporting person							
	None									
12	Check box if the ag	~ ~	(11) excludes certain shares							
13	Percent of class repr	resented by amount in	row (11)							
	0.00%									

Type of reporting person (SEE INSTRUCTIONS)
HC, CO

CUS	SIP No	. 878293109										
Names of reporting persons I.R.S. identification nos. of above persons (entities only) GAMCO Investors, Inc. No. 13-4007862 Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a)												
		Check the appropria	heck the appropriate box if a member of a group (SEE INSTRUCTIONS) (a)									
		(b)										
	3	Sec use only	Sec use only									
	4	Source of funds (SEE INSTRUCTIONS) None										
	5	Check box if disclosure of legal proceedings is required pursuant to items 2 (d) or 2 (e)										
	6	Citizenship or place New York	e of organization									
		Number Of	: 7	Sole voting power								
		Shares	· :	None								
		Beneficially	: 8	Shared voting power								
		Owned	:	None								
		By Each	: : 9 :	Sole dispositive power								
		Reporting	:	None								
		Person	: :10 :	Shared dispositive power								
		With	:	None								
11		Aggregate amount	: beneficially owned	by each reporting person								
		None										
12		Check box if the ag (SEE INSTRUCTION)		row (11) excludes certain shares								
13		Percent of class rep	resented by amoun	at in row (11)								
		0.00%										

Type of reporting person (SEE INSTRUCTIONS)

HC, CO

CUSIP No. 878293109

- Names of reporting persons
 I.R.S. identification nos. of above persons (entities only)
 Mario J. Gabelli
- 2 Check the appropriate box if a member of a group (SEE INSTRUCTIONS) (a)

(b)

- 3 Sec use only
- 4 Source of funds (SEE INSTRUCTIONS)
 None
- 5 Check box if disclosure of legal proceedings is required pursuant to items 2 (d) or 2 (e)
- 6 Citizenship or place of organization USA

Number Of : 7 Sole voting power

.

Shares : None (Item 5)

:

Beneficially: 8 Shared voting power

.

Owned: None

.

By Each : 9 \$ 9,477 \$ 314,370 \$ 41,400(15) \$ 507,438

. :

Reporting :

Person

With

Vincent J.	2007	\$ 130,769	\$ 13,554	\$ 3,200(5) \$ 147,523
Coates	2006	\$ 204,800		\$ 204,800
	2005	\$ 204.800		\$ 204.800

Vice-Chairman of the Board, former Chairman of the Board of Directors and Secretary

(1)	Representing bonuses and/or commissions paid to the named executive officers.
(2)	Amounts shown do not reflect compensation actually received by the named executive officer. Instead, the amounts shown are the aggregate fair value of stock options granted for financial statement reporting purposes, as determined pursuant to SFAS 123R. The assumptions used to calculate the value of option awards are set forth under Note 3 of the Notes to Consolidated Financial Statements included in Nanometrics Annual Report on Form 10-K for the fiscal year ended December 29, 2007 filed with the SEC on March 13, 2008.
(3)	Employment with Nanometrics commenced on July 21, 2006 with our acquisition of Accent Optical Technologies, Inc.
(4)	Representing payment to Mr. Rhine of \$13,750 for an auto allowance, \$99,010 for the use of a private jet and \$290 of health care reimbursement benefit extended to directors and Section 16 Officers.
(5)	Amount is comprised of a car allowance.
(6)	Amount is comprised of \$32,000 for relocation benefits and living allowance, \$17,470 for reimbursement of relocation expenses, \$5,200 for a car allowance and \$145 of health care reimbursement benefit extended to directors and Section 16 Officers.
(7)	Amount represents health care reimbursement benefit extended to directors and Section 16 Officers.
(8)	Amount represents gains on the exercise of stock options.
(9)	Mr. Heaton s employment with Nanometrics terminated on March 26, 2007.
(10)	This amount consists of \$295,414 for severance paid following his employment termination, \$252,674 for gains on the exercise of stock options, \$36,781 for accrued vacation following his employment termination, \$4,233 for use of a company car.
(11)	This amount consists of \$36,715, \$12,887 and \$7,500, respectively, for accrued vacation, use of a company car and a golf club membership to Mr. Heaton.
(12)	Represents payments to Mr. Heaton of \$21,200 and \$4,800, respectively, for accrued vacation time and a car allowance.
(13)	Mr. McCutcheon s employment with Nanometrics terminated on April 24, 2007.
(14)	This amount consists of \$189,635 for severance paid following his employment termination and \$15,856 for accrued vacation following his employment termination.
(15)	This amount consists of consulting fees paid to Mr. Wright prior to his employment.
	12

Stock Options Granted in the Fiscal Year Ended December 29, 2007

The following table sets forth information with respect to stock options granted during the fiscal year ended December 29, 2007 to each of the named executive officers.

GRANTS OF PLAN-BASED AWARDS

For Fiscal Year 2007

		Estimated Non-Equity Threshold	Incentive	Plan Awa	Estimate rd k(≜) ler Equity Threshold	ed Possible Incentive Target	•	of Shares	All Other Option Awards: Number of Securities Underlying Options	or (Base Price of O	Grant Date Fair Value f Stock and Options
Name	Date	(\$)	(\$)	(\$)	(#)	(#)	(#)	(#)	(#)	(\$/sh)	(\$)
Bruce C. Rhine Timothy J. Stultz	8/29/2007 8/29/2007	\$ 68,681 \$		(2)) <i>(</i>	`,	50,000	200,000		\$ 367,500 \$ 771,240
Gary C. Schaefer	11/5/2007 5/24/2007 11/5/2007	\$ 20,000 \$	20,000	\$ 20,000				20,000	-,	\$ 6.12	\$ 187,800 \$ 131,480 \$ 239,450
Bruce A. Crawford	7/10/2007 6/8/2007 6/8/2007							20,000		\$ 6.25	\$ 136,000 \$ 20,107 \$ 20,107
John D. Heaton	3/26/2007(3) 3/26/2007(3) 6/25/2007(4) 6/25/2007(4) 6/25/2007(4)								33,333 100,000 33,333	\$ 12.02 \$ 10.23 \$ 7.03 \$ 10.23 \$ 12.02	\$ 507 \$ 11,770 \$ 3
Douglas J. McCutcheon											
Quentin B. Wright	6/8/2007 6/8/2007									\$ 6.25 \$ 6.25	
Vincent J. Coates	11/29/2007 11/29/2007									\$ 9.07 \$ 9.58	

- Actual bonuses received by these named executive officers for fiscal year 2007 are reported in the Summary Compensation Table under the column entitled Bonus.
- (2) No maximum dollar amount was set in connection with Dr. Stultz s non-equity variable compensation for fiscal year 2007.
- (3) In connection with Mr. Heaton s employment agreement, we agreed to provide for twelve months of accelerated vesting on options granted to Mr. Heaton on May 26, 2004 and May 24, 2006.
- (4) In connection with our entry into a Separation and Release Agreement with Mr. Heaton on June 25, 2007, we agreed to provide an extended deadline to exercise options originally granted to Mr. Heaton on May 26, 2004, August 19, 2003 and May 24, 2006.

Aggregated Option Exercises in Last Fiscal Year and Fiscal Year-End Option Values

The following table sets forth the number of shares covered by both exercisable and un-exercisable stock options held by each of the named executive officers at the end of the fiscal year which ended December 29, 2007.

OUTSTANDING EQUITY AWARDS AT FISCAL 2007 YEAR-END

	Number of Sec Unexercise	Stock Number of Shares or Units of Stock	Awards Market Value of Shares or Units of Stock			
Name	Exercisable	Un-exercisable	Exercise Price (\$)	Expiration Date	That Have Not Vested (#)	That Have Not Vested (\$)
Bruce C. Rhine	8,333 7,666 3,661 28,314	16,667 164 1,503 56,628	\$ 8.55 \$ 8.89 \$ 8.89 \$ 15.98	11/30/2013 07/24/2013 07/24/2013 01/25/2013		
Timothy J. Stultz		200,000	\$ 7.35	08/29/2010	50,000	\$ 482,500

		Option Awards Number of Securities Underlying Unexercised Options (#)			Stock A Number of Shares or	Awards Market Value of Shares or Units of Stock		
			Option	Option	Units of Stock	T	hat Have	
			Exercise	Expiration	That Have Not		Not	
Name	Exercisable	Un-exercisable	Price (\$)	Date	Vested (#)	V	ested (\$)	
Gary C. Schaefer					20,000	\$	193,000	
		50,000	\$ 9.39	05/24/2014				
		40,000	\$ 6.12	11/05/2014				
Bruce A. Crawford					20,000	\$	193,000	
	1,041	5,209	\$ 6.25	06/08/2014				
	260	5,990	\$ 6.25	06/08/2014				
	1,621	3,243	\$ 8.55	11/30/2013				
	4,651	100	\$ 8.89	07/24/2013				
	33,333	66,667	\$ 8.89	07/24/2013				
	2,066		\$ 8.89	07/24/2014				
	3,296	1,352	\$ 8.89	07/24/2013				
	6,969	3,360	\$ 8.89	07/24/2013				
	5,508	11,017	\$ 15.98	01/25/2013				
	3,098		\$ 7.27	05/08/2010				
	2,065		\$ 7.27	12/13/2008				
John D. Heaton								
Douglas J. McCutcheon								
Quentin B. Wright	1,041	5,209	\$ 6.25	06/08/2014				
	260	5,990	\$ 6.25	06/08/2014				
	5,000	10,000	\$ 9.87	07/05/2013				
	33,333	16,667	\$ 11.52	04/15/2012				
Vincent J. Coates		1,196(1)	\$ 9.07	11/29/2012				
		2,500(1)	\$ 9.58	11/29/2012				

⁽¹⁾ The options granted to Mr. Coates were in his capacity as a non-employee director.

OPTION EXERCISES AND STOCK VESTED

The following table shows all stock options exercised and value realized upon exercise, and all stock awards vested and value realized upon vesting, by the named executive officers during the fiscal year ended on December 29, 2007.

OPTION EXERCISES AND STOCK VESTED

For Fiscal Year 2007

	Option Awards Number			Stock Awards Number of		
N	of Shares Acquired on	Re	Value alized on	Shares Acquired on	Value Realized on	
Name Bruce C. Rhine	Exercise (#)	Exer	cise (\$) (1)	Vesting (#)	Vesting (\$)	
Timothy J. Stultz Gary C. Schaefer						
•						
Bruce A. Crawford John D. Heaton	20,000	¢	2 900			
Joini D. Heaton		\$	3,800			
	20,000	\$	4,200			
	38,519	\$	26,193			
	17,000	\$	9,350			
	6,400	\$	4,480			
	20,000	\$	13,200			
	600	\$	402			
	50,000	\$	27,500			
	5,000	\$	3,150			
	100,000	\$	69,000			
	42,626	\$	20,887			
	700	\$	336			
	7,342	\$	3,157			
	5,016	\$	1,956			
	1,838	\$	864			
	10,000	\$	5,500			
	8,759	\$	4,817			
	16,200	\$	8,586			
	1,900	\$	760			
	20,500	\$	10,660			
	50,100	\$	24,549			
	13,300	\$	7,049			
	6,700	\$	2,278			
Douglas J. McCutcheon						
Quentin B. Wright						

Vincent J. Coates

Compensation of Directors

During fiscal year 2007, directors who are not also employees of Nanometrics received an annual retainer fee of \$15,000, plus \$1,500 for each board meeting attended. The audit committee chairman and compensation committee chairman received an incremental \$8,000 and \$3,000 annual retainer, respectively, for serving in such capacities and each committee member receives an additional \$2,000 annual retainer. All directors received \$1,500 for special board or committee meetings attended on site and \$500 for telephonic meetings lasting greater than 30 minutes. Non-employee directors were also eligible to participate in our 2000 Director Stock Option Plan whereby each director received a stock option award of 20,000 options upon appointment to the board of directors and 2,500 stock options at the beginning of each fiscal quarter thereafter, provided the director has served on the board of directors for at least six months on each grant date.

⁽¹⁾ The value realized equals the difference between the option exercise price and the fair market value of Nanometrics common stock on the date of exercise, multiplied by the number of shares for which the option was exercised.

On November 29, 2007, upon the recommendation of the Compensation Committee, the board of directors approved a new policy for non-employee directors. Directors who are not also employees of Nanometrics shall receive an annual retainer fee of \$20,000, plus \$1,500 for each board meeting attended. The Nominating and Governance Committee Chairman, Audit Committee Chairman, Compensation/Stock Option Committee Chairman and Lead Independent Director shall receive an incremental \$5,000, \$10,000, \$5,000 and \$5,000 annual retainer, respectively, for serving in such capacities and each committee member shall receive an additional \$2,000 annual retainer. All non-employee directors shall receive \$1,500 for special board or committee meetings attended on site and \$500 for telephonic meetings lasting greater than 30 minutes. Joseph F. Dox has waived the right to receive such board of director annual retainer and meeting attendance fees. Non-employee directors are also eligible to participate in our Directors Stock Option Plan whereby each such director shall receive a stock option award of 20,000 options upon appointment to the board of directors and 2,500 stock options on the second business day of each fiscal quarter thereafter, provided the director has served on the board of directors as a non-employee director for at least six months on each grant date. One-third (1/3) of the shares subject to the option shall vest on the one year anniversary of the vesting commencement date, and an additional one-third (1/3) of the shares subject to the option will vest each year thereafter on the annual anniversary of the vesting commencement date, subject to the director continuing to provide services to Nanometrics through each such date. Each non-employee director shall also receive an award of 2,000 restricted stock units under our 2005 Equity Incentive Plan on the second business day of each fiscal year, provided the director has served on the board of directors as a non-employee director for at least six months on each grant date. One-third (1/3) of the restricted stock units subject to the award shall vest on the later of the one year anniversary of the vesting commencement date and the opening of any applicable company trading window, and an additional one-third (1/3) of the restricted stock units subject to the award will vest each year thereafter on the later of the annual anniversary of the vesting commencement date and the opening of any applicable company trading window, subject to the director continuing to provide services to Nanometrics through each such date.

On January 7, 2008, upon the recommendation of the Compensation Committee, the board of directors also approved an annual retainer fee for the Chairman of the Board of \$15,000 for serving in such capacity.

The following table shows compensation information for Nanometrics directors for fiscal year 2007.

DIRECTOR COMPENSATION

For Fiscal Year 2007

Name	I	Earned or Paid in Cash (\$)		Stock Awards (\$)	Opt	ion Awards (\$) (1)	Option Awards (#)	Com	l Other pensation (\$) (2)	Total (\$)
Bruce C. Rhine (3)	\$				\$			\$		\$
Vincent J. Coates	\$	10,043			\$	13,554	3,696(4)	\$	125	\$ 23,722
J. Thomas Bentley	\$	46,179			\$	34,159	10,000	\$	125	\$ 80,464
Joseph F. Dox	\$		(5)		\$	52,310	20,000	\$	(6)	\$ 52,310
William G. Oldham	\$	32,297			\$	34,159	10,000	\$	125	\$ 66,581
Stephen J Smith	\$	33,000			\$	34,159	10,000	\$	146	\$ 67,305
Edmond R. Ward	\$	41,797			\$	34,159	10,000	\$	1,867	\$77,823

- (1) Amounts shown do not reflect compensation actually received by the named executive officer. Instead, the amounts shown are the aggregate fair value of stock options granted for financial statement reporting purposes in 2007, as determined pursuant to SFAS 123R. The assumptions used to calculate the value of option awards are set forth under Note 1 of the Notes to Consolidated Financial Statements included in Nanometrics Annual Report on Form 10-K for fiscal 2007 filed with the SEC on March 13, 2008.
- (2) Representing health care reimbursement benefit extended to directors and Section 16 Officers.
- (3) Compensation earned in Mr. Rhine s capacity as a named executive officer is shown in the Summary Compensation Table on page 12.

- (4) Representing a discretionary prorated quarterly option grant and discretionary full quarterly option grant to Mr. Coates in connection with his change in status to a non-employee director on August 17, 2007.
- (5) In our sole discretion, we made a charitable donation to an eligible IRS recognized nonprofit organization in the amount of \$22,804 representing the fees Mr. Dox would have received in his capacity as a director for the fiscal year 2007.
- (6) In our sole discretion, a charitable donation in the amount of \$95,000 was made to an eligible IRS recognized nonprofit organization in honor of Mr. Dox

Employment Contracts and Termination of Employment and Change-in-Control Arrangements

As part of Nanometrics hiring efforts, we sometimes enter into employment agreements and severance agreements with our named executive officers that provide for certain severance benefits, including but not limited to, continuation of salary, continuation of bonus plan participation, continuation of health care benefits and acceleration of equity. The Compensation Committee decided, in its judgment, that these types of agreements are often needed to recruit executive officers to join Nanometrics and to mitigate the risks associated with leaving former employers and assuming the challenges of new executive positions.

Pursuant to the terms of an agreement between Nanometrics and Vincent J. Coates dated May 1, 1985, as amended and restated in August 1996 and April 1998, Nanometrics is obligated to continue to pay Mr. Coates his salary and benefits for five years from the date of his resignation as Chairman of the Board of Directors in the event Mr. Coates is required to resign under certain circumstances, including a change of control. Mr. Coates voluntarily resigned his position as Chairman of the Board of Directors on July 26, 2007 and no payments shall be required pursuant to this agreement.

In October 2006, Nanometrics entered into an agreement with John D. Heaton pursuant to which Nanometrics agreed to pay Mr. Heaton his annual salary of \$404,250 for a period of twelve (12) months from the date that he is required or requested for any reason not involving good cause, including a change of control, to involuntarily relinquish his positions with Nanometrics as President, Chief Executive Officer and director, provided that Mr. Heaton executes a separation agreement and general release, refrains from disparagement of Nanometrics, and continues to comply with the terms of a certain confidential information agreement. Mr. Heaton s employment with Nanometrics terminated on March 26, 2007, and, on June 25, 2007, we entered into a Separation Agreement and Release with Mr. Heaton pursuant to which we paid Mr. Heaton his annual salary, less applicable withholdings, through March 26, 2008 and provided twelve (12) months accelerated vesting and an extended deadline to exercise with respect to his outstanding, unvested equity awards.

In September 2005, Douglas J. McCutcheon became Executive Vice President, Finance and Administration and Chief Financial Officer of Nanometrics. In connection with Mr. McCutcheon s employment agreement, Nanometrics agreed to pay Mr. McCutcheon twelve (12) months of continued salary at his then-effective annual rate if Nanometrics terminates him for any reason other than for good cause, provided that Mr. McCutcheon executes a general release. Mr. McCutcheon s employment with Nanometrics terminated on April 24, 2007 and we paid Mr. McCutcheon his annual salary through April 24, 2008.

In July 2007, the Compensation Committee approved and, in August 2007 Nanometrics entered into, an executive severance agreement with Bruce A. Crawford, our Chief Operating Officer, which provides for certain severance benefits following a termination without cause, including six months continuing salary, reimbursements for his premium payments under COBRA for twelve months and twelve months of equity award acceleration, provided that Mr. Crawford executes a general release.

In August 2007, we announced the appointment of Timothy J. Stultz, Ph.D. as our President, Chief Executive Officer and a director. In connection with his appointment, we offered Dr. Stultz a compensation package including certain severance benefits consisting of continued salary payments and equity award acceleration for termination without cause or for good reason, including in connection with a change in control. Specifically, Nanometrics agrees to pay Dr. Stultz (i) his annual salary, including bonuses earned or accrued, and reimbursements for his premium payments under the Consolidated Omnibus Budget Reconciliation Act (COBRA) for twelve (12) months from the date of separation in the event that Dr. Stultz semployment with Nanometrics is terminated by us without cause or Dr. Stultz resigns for good reason within his first twelve months of employment with Nanometrics; (ii) his annual salary, including bonuses earned or accrued, and reimbursements for his premium payments under COBRA for nine months from the date of separation in the event that Dr. Stultz semployment with Nanometrics is terminated by us without cause or Dr. Stultz resigns for good reason during the period beginning one year and one day after Dr. Stultz shire date until two years from Dr. Stultz hire date; (iii) his annual salary, including bonuses earned or accrued, and reimbursements for his premium payments under COBRA for six months from the date of separation in the event that

Dr. Stultz s employment with Nanometrics is terminated by us without cause or Dr. Stultz resigns for good reason during the period beginning two years and one day from Dr. Stultz hire date or thereafter; and (iv) his annual salary, including bonuses earned or accrued, and reimbursements for his premium payments under COBRA for twelve (12) months and 100% acceleration of all equity awards, from the date of separation in the event that Dr. Stultz s employment with Nanometrics is terminated by us without cause or Dr. Stultz resigns for good reason with twelve months following a change of control, provided that Dr. Stultz executes a general release.

In November 2007, Gary C. Schaefer became Chief Financial Officer and Executive Vice President of Finance and Administration of Nanometrics. In January 2008, the Compensation Committee approved an employment agreement with Mr. Schaefer, which provides for certain severance benefits following a termination without cause, including twelve months continuing salary, performance bonus plan participation, reimbursements for his premium payments under COBRA and Exec-U-Care, and 100% acceleration of all equity awards, provided that Mr. Schaefer executes a general release.

The table below estimates amounts payable upon a separation as if the individuals were separated on December 29, 2007.

Name	Benefit	Not in Connection with Due to Disability or Termination Without Cause (\$)	h a Change of Control Due to Death (\$)	a To Wit for G Due	Connection with Change of Control ermination thout Cause, ood Reason or to Disability r Death (\$)
Timothy J. Stultz	Severance pay Variable compensation payment Stock option vesting acceleration Health care benefits continuation Life insurance continuation	\$ 377,000 13,097		\$	377,000 1,013,100 13,097
Gary C. Schaefer	Total value: Severance pay Variable compensation payment Stock option vesting acceleration Health care benefits continuation Life insurance continuation Total value:	\$ 390,097 \$ 300,000 60,000(1) 409,340 13,940 \$ 783,280		\$ \$	1,403,197 300,000 60,000 409,340 13,940 783,280
Bruce A. Crawford	Severance pay Variable compensation payment Stock option vesting acceleration Health care benefits continuation Life insurance continuation Total value:	\$ 156,750 290,034 18,029 \$ 464,813		\$	156,750 290,034 18,029
John D. Heaton	Severance pay (2) Variable compensation payment Stock option vesting acceleration Health care benefits continuation (2) Life insurance continuation	\$ 108,836 3,901 \$ 112,737			
Douglas J. McCutcheon	Severance pay (2) Variable compensation payment Stock option vesting acceleration Health care benefits continuation Life insurance continuation	\$ 95,365			

Total \$ 95,365

- (1) Mr. Schaefer is due a bonus equal to 40% of base salary if we meet our annual operating plan with \$60,000 minimum due. The maximum payment to Mr. Schaefer would be \$120,000.
- (2) Amount represents the remaining amount due under the employment contract. Compensation/Stock Option Committee Interlocks and Insider Participation

officers serve as a member of our board of directors or compensation committee.

Messrs. Edmond R. Ward, J. Thomas Bentley and Stephen J Smith served on the Compensation Committee during fiscal year 2007. No member of such Compensation Committee is or was at any time an officer or employee of Nanometrics or any of its subsidiaries. During fiscal year 2007, none of our executive officers served on the Compensation Committee or board of directors of any other company whose executive

COMPENSATION COMMITTEE REPORT

Compensation/Stock Option Committee Report

The Compensation Committee has reviewed and discussed the Compensation Discussion and Analysis required by Item 402(b) of Regulation S-K with management and, based on such review and discussions, the Compensation Committee recommended to the board of directors that the Compensation Discussion and Analysis be included in this Form 10-K/A.

Members of the Compensation/Stock Option Committee

Edmond R. Ward, Chairman

J. Thomas Bentley

Stephen J Smith

ITEM 12. SECURITY OWNERSHIP OF CERTAIN BENEFICIAL OWNERS AND MANAGEMENT AND RELATED STOCKHOLDER MATTERS

Equity Compensation Plan Information

All of our equity compensation plans except the 2002 Nonstatutory Stock Option Plan were approved by our stockholders. The following table gives information about the common stock that may be issued under all of our existing equity compensation plans as of December 29, 2007.

Plan category	Number of securities to be issued upon exercise of outstanding options, warrants and rights (a)	Weighted-average exercise price of outstanding options, warrants and rights (b)		Number of securities remaining available for future issuance under equity compensation plans (excluding securities reflected in column (a)) (c)
Equity compensation plans approved by security holders	2,543,982	\$	10.26	1,480,455
Equity compensation plans not approved by security holders (1)	576,485	\$	8.56	127,456
Total	3,120,467	\$	9.94	1,607,911

(1) The material features of each plan adopted without the approval of security holders is set forth in Footnote 13 to the consolidated financial statements included in our Form 10-K for the fiscal year ended December 29, 2007, and is incorporated by reference herein.

Nanometrics Principal Stockholders

The following table sets forth beneficial ownership of Nanometrics common stock as of April 11, 2008, by each director, by each of the executive officers, by all directors and executive officers as a group, and by all persons known to Nanometrics to be the beneficial owners of more than 5% of Nanometrics stock. Unless otherwise indicated, the address of each executive officer or director of Nanometrics is 1550 Buckeye Drive, Milpitas, CA 95035. As of the close of business on April 11, 2008, there were 18,597,303 shares of common stock outstanding.

Amount and Nature of Beneficial Ownership (1) Shares

. . . .

Stock Options

		Exercisable	Total Shares	
		within 60 days	Beneficially	Percent of
Name of Beneficial Owner Principal Stockholders	Shares	of 4/11/08	Owned	Class
Dimensional Fund Advisors LP (2)	1,256,009		1,256,009	6.8%
Peter M. Joost (3)	1,317,395		1,317,395	7.1%
Royce and Associates, LLC (4)	1,392,600		1,392,600	7.5%
The TCW Group, Inc. (5)	1,883,396		1,883,396	10.1%

Amount and Nature of Beneficial Ownership (1) Shares

	Deficition Ownership (1) Shares			
		Stock Options		
		Exercisable	Total Shares	
		within 60 days	Beneficially	Percent of
Name of Beneficial Owner Directors and Officers	Shares	of 4/11/08	Owned	Class
Bruce C. Rhine (6)	918,810	77,009	995,819	5.3%
Vincent J. Coates (7)	3,498,614		3,498,614	18.8%
Howard A. Bain III (8)	1,000		1,000	*
J. Thomas Bentley		28,332	28,332	*
Joseph F. Dox (9)	1,915	6,666	8,581	*
William G. Oldham, Ph.D.		28,332	28,332	*
Stephen J Smith, Ph.D.		28,332	28,332	*
Timothy J. Stultz, Ph.D.				*
Edmond R. Ward, Ph.D.	2,000	28,332	30,332	*
Gary C. Schaefer		13,333	13,333	*
Bruce A. Crawford	49,604	74,173	123,777	*
John D. Heaton (10)				*
Douglas J. McCutcheon (11)	2,292		2,292	*
Quentin B. Wright (12)	5,418	64,426	69,844	*
All named officers and directors as a group (14 persons)	4,479,653	348,935	4,828,588	25.5%

^{*} Less than 1%.

- (1) As determined in accordance with Rule 13d-3 under the Securities and Exchange Act of 1934.
- (2) According to a Schedule 13G/A filed with the SEC on February 6, 2008, Dimensional Fund Advisors LP may be deemed to be the beneficial owner of 1,256,009 shares of common stock. Dimensional Fund Advisors LP (formerly, Dimensional Fund Advisors Inc.)
 (Dimensional), an investment advisor registered under Section 203 of the Investment Advisors Act of 1940, furnishes investment advice to four investment companies registered under the Investment Company Act of 1940, and serves as investment manager to certain other commingled group trusts and separate accounts. These investment companies, trusts and accounts are the Funds. In its role as investment advisor or manager, Dimensional possesses investment and/or voting power over the securities that are owned by the Funds, and may be deemed to be the beneficial owner of the shares held by the Funds. All of the shares are owned by the Funds. Dimensional disclaims beneficial ownership of such securities. The address of Dimensional is 1299 Ocean Avenue, Santa Monica, CA 90401.
- (3) According to a Schedule 13G/A filed with the SEC on February 7, 2008 and information available to the Company, Peter M. Joost may be deemed to be the beneficial owner of 1,317,395 shares of common stock which includes 1,052,816 shares of common stock held by JFI II, L.P. (JFI II) and 264,579 shares of common stock held by Peter M. and Lindsay M. Joost, Trustees U/T/A dated April 11, 2002 (the Joost Trust). The sole general partner of JFI II is Joost Enterprises Corporation (JEC). Mr. Joost is the President of, and the Joost Trust holds all of the outstanding shares issued by, JEC. Sole voting and dispositive power for the shares held by JFI II is exercised through JEC. Mr. and

Mrs. Joost share voting and dispositive power for the shares held by the Joost Trust. The address of these individuals and entities is c/o Joost Enterprises Corporation, 555 California Street, Suite 5180, San Francisco, California 94104.

- (4) According to a Schedule 13G/A filed with the SEC on January 30, 2008, Royce and Associates, LLC (Royce) may be deemed to be the beneficial owner of 1,392,600 shares of common stock. Various accounts managed by Royce have the right to receive or the power to direct the receipt of dividends from, or the proceeds from the sale of shares of the issuer. The interest of one account, Royce Opportunity Fund an investment company registered under the Investment Company Act of 1940 and managed by Royce, amounted to 1,008,800 shares. The address of Royce is 1414 Avenue of the Americas, New York, NY 10019.
- (5) According to a Schedule 13G/A filed with the SEC on March 10, 2008, The TCW Group, Inc. (TCW), on behalf of itself and its direct and indirect subsidiaries, which collectively constitute The TCW Group, Inc. business unit (the TCW Business Unit), the TCW Business Unit may be deemed to be the beneficial owner of 1,883,396 shares of common stock. The TCW Business Unit is primarily engaged in the provision of investment management services. The ultimate parent company of TCW is Societe Generale, S.A. (SG). The principal business of SG is acting as a holding company for a global financial services group, which includes certain distinct specialized business units that are independently operated, including the TCW Business Unit. SG, for purposes of the federal securities laws, may be deemed ultimately to control TCW and the TCW Business Unit. SG disclaims beneficial ownership of the shares beneficially owned by TCW. TCW disclaims beneficial ownership of the shares beneficially owned by SG and any of SG s other business units. TCW shares voting power of 603,712 shares and shares dispositive power of 1,883,396 shares. The address for TCW Group is 865 South Figueroa Street, Los Angeles, CA 90017.
- (6) Includes (i) 12,518 shares held of record jointly by Mr. Rhine and his spouse as joint tenants with rights of survivorship and (ii) 906,292 shares held of record by the Bruce Charles Rhine and Martha Hawn Rhine Family Trust.
- (7) Includes (i) 120 shares held of record by Mr. Coates and (ii) 3,498,494 shares of common stock held of record by the Vincent J. Coates Separate Property Trust, U/D/T dated August 7, 1981, for which Mr. Coates acts as trustee.
- (8) Shares held of record by Mr. Bain and his spouse.
- (9) Includes 485 shares held of record by Mr. Dox; (ii) 305 shares held of record by the Alexia Dox Trust (the AD Trust); and (iii) 1,125 shares held of record by the Emilie Dox Trust (the ED Trust). Ira Greenspan is the Trustee of the AD Trust and the ED Trust and has sole voting and investment power over the shares held by the AD Trust and the ED Trust. Mr. Dox disclaims beneficial ownership of the shares held by the AD Trust and the ED Trust.
- (10) Mr. Heaton resigned from all positions held at Nanometrics effective March 26, 2007.
- (11) Mr. McCutcheon resigned from all positions held at Nanometrics effective April 24, 2007.
- (12) Mr. Wright, our Vice President, External Reporting and Strategic Projects, served as interim Chief Financial Officer from April 2007 until November 2007 and as Chief Accounting Officer from April 2005 until November 2007.

ITEM 13. CERTAIN RELATIONSHIPS AND RELATED TRANSACTIONS, AND DIRECTOR INDEPENDENCE Related Party Transaction Policy

Nanometrics policy towards Related Party Transactions requires that the Audit Committee review any transaction or series of transactions in excess of \$50,000 in any year between Nanometrics, on the one hand, and an officer, director or 5% or greater stockholder, on the other. Nanometrics Chief Financial Officer has responsibility for bringing the facts concerning a proposed related party transaction to the Audit Committee. The policy permits approval only in the event of a finding that the transaction is on terms no less favorable than would have been obtained in an ordinary arms-length transaction with an independent third party.

ITEM 14. PRINCIPAL ACCOUNTING FEES AND SERVICES

The following table summarizes the aggregate fees that we paid or expect to pay our independent registered public accounting firm, BDO Seidman, LLP for fiscal 2007 and 2006.

	Fiscal 2007	Percentage Pre-approved by Audit Committee	Fiscal 2006	Percentage Pre-approved by Audit Committee
Audit Fees (1)	\$ 1,178,515	100 %	\$ 1,903,109	100 %
Audit Related Fees (2)	70,905	100 %	162,220	100 %
Tax Fees (3)	21,000			100 %
All Other Fees				
Total	\$ 1,270,420		\$ 2,065,329	

(1) Fees for audit services consist of:

Audit of our annual financial statements including management s assessment of internal controls over financial reporting;

Reviews of our quarterly financial statements; and

Statutory and regulatory audits, consents and other services.

- (2) Fees for audit-related services billed in fiscal 2007 consisted of consultation concerning financial accounting and reporting standards (\$70,905). Fees for audit-related services billed in fiscal 2006 consisted of (i) consultations and due diligence related to our acquisition of Accent Optical Technologies, Inc. (\$144,345) and (ii) consultation concerning financial accounting and reporting standards (\$17,875).
- (3) This figure relates to tax return preparation for certain foreign subsidiaries in fiscal 2007. In considering the nature of the services provided by the independent registered public accountants, the Audit Committee determined that such services are compatible with the provision of independent audit services. The Audit Committee discussed these services with the independent registered public accountants and our management to determine that they are permitted under the rules and regulations concerning auditors independence promulgated by the Securities and Exchange Commission to implement the Sarbanes-Oxley Act of 2002, as well as the American Institute of Certified Public Accountants.

Audit Committee Pre-Approval Policy

Pursuant to our audit committee charter, our Audit Committee must pre-approve all audit and non-audit services, and the related fees, provided to us by our independent auditors, or subsequently approve non-audit services in those circumstances where a subsequent approval is necessary and permissible under the Exchange Act or the rules of the Securities and Exchange Commission. Accordingly, the Audit Committee pre-approved all services and fees provided by BDO Seidman, LLP during the year ended December 29, 2007 and has concluded that the provision of these services is compatible with the accountants independence.

PART IV

ITEM 15. EXHIBITS AND FINANCIAL STATEMENT SCHEDULES Exhibits.

The following exhibits are filed with this Annual Report on Form 10-K/A:

Exhibit No. 31	Description Rule 13a-14(a)/15d-14(a) Certifications
31.1	Certification of Timothy J. Stultz, principal executive officer of the Registrant, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
31.2	Certification of Gary C. Schaefer, principal financial officer of the Registrant, pursuant to Section 302 of the Sarbanes-Oxley Act of 2002
32	Section 1350 Certifications
32.1	Certification of Timothy J. Stultz, principal executive officer of the Registrant, and Gary C. Schaefer, principal financial officer of the Registrant, pursuant to Section 906 of the Sarbanes-Oxley Act of 2002

SIGNATURES

Pursuant to the requirements of Section 13 or 15(d) of the Securities Exchange Act of 1934, the registrant has duly caused this report to be signed on its behalf by the undersigned, thereunto duly authorized.

Dated: April 25, 2008

NANOMETRICS INCORPORATED

By: /s/ Gary C. Schaefer Chief Financial Officer and Vice President of Finance and Administration